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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/687,629

10/20/2003

Satoshi Inoue

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03/05/2008

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EXAMINER

PAN, DANIEL H

ART UNIT

PAPER NUMBER

2183

NOTIFICATION DATE

DELIVERY MODE

03/05/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/687,629	Applicant(s) INOUE, SATOSHI	
	Examiner Daniel Pan	Art Unit 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-11 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 12-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-11 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
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| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claims 7-11 and 17-20 remain for examination. Claims 1-6, 12-16 have been canceled.

Claims 7-11,17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mergard et al. (6,401,156) in view of McDonough et al. (5,784,532).

As to the newly amended feature of claims 1,17, the control bus to both processor core and extension unit , see the response to applicant's remarks in b) below.

The rejections are maintained and incorporated by reference the last Office action on 06/11/07.

The response filed on 12/17/07 has been fully considered but is not persuasive.

In the remarks , applicant argued that :

- a) PIC 48 is not reconfigurable;
- b) PIC 48 is connected to GP bus 72 not processor bus 76;
- c) processor of claim 8 is not disclosed or suggested;
- d) claim 9 recites an instruction decoder which comprises a reconfigurable logic circuit that is the same as reconfigurable first extension unit;
- e) no description of DMAC 22 sending data to PIC 48.

As to a), examiner holds the programmable is the configurable. For example, a programmer could assign a hardware configuration or connection in his program.

As to b), Fig.7 clearly show the general purpose bus GP 72 is connected to the GP-Bus 22. The GP-Bus DMAC 22 is part of the processor bus interface 20 which is connected to the processor bus 72 (see fig.1). Therefore, PIC 48 is connected to processor bus 76 via the processor bus interface [20,22]. The control bus being the bus 80, 82, 20 and the bus 76 connected to both processor core [36] and extension unit [48] (see fig.1, see fig.7 how the PIC 48 is connected to 22 in 20, see also how the PIC 48 connected to 82 which is connected to processor 32 in fig.4).

As to c), claim 8 only recites instruction decoder, a control register and local memory. No specific functionalities have been recited. Examiner holds that an instruction decoder, a control register and local memory have been known in the art unless there is a unique functionality for each of the elements.

As to d) , examiner would like to point out that an extension unit comprises an instruction decoder has to be the same as the reconfigurable logic of first execution unit in order to effectuate the reconfiguration. Since Mergard already taught the first execution unit is a reconfigurable first execution unit (see how microcontroller M granted PC/AT functionality of programmable interrupt controller and programmed the PIC functionalities in col.10, lines 1-13), the reconfigurable logic circuit had to be the same as the reconfigurable first extension unit.

As to e), see how each of the DMA channels in DMA 22 connected to GP bus 72 (connected to PIC 48) for read and write operations in col.16, lines 35-67, col.17, lines 1-3).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

21 Century Strategic Plan

/Daniel Pan/

Primary Examiner, Art Unit 2183